# SKRIPSI

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## OPTIMASI PENGGUNAAN AMPAS TAHU (SUMBER N) DALAM MEDIA ISP-4 DAN MEDIA NaCl 0,9 % PADA PERTUMBUHAN *Streptomyces griseus*



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**LEMBAR PENGESAHAN**

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**Dibuat Untuk Memenuhi Syarat Mencapai Gelar Sarjana Sains Pada**
**Fakultas Farmasi Universitas Airlangga**
**Surabaya**
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# ABSTRACT

Refuse of tofu can be used as the growth medium of bacteria. Based on analysis that the waste of tofu production still contains protein 21-29% w/w of the dry material. Besides, the waste of tofu production also contains more than 18 kinds of amino acids. This study used 6 kinds of formulas. The Formula A containing 0,5% refuse of tofu in ISP-4 medium. The Formula B, C and D successive containing 0,5%; 1,0% and 2,0% refuse of tofu in ISP-4 medium without (NH4)2SO4. The formula E and F each containing 1,0% and 2,0% refuse of tofu in NaCl 0,9% medium.

The results from scratching Streptomyces griseus ATCC 10137 cells on 6 kinds of formulas show that in the formula B, C and D, growth of Streptomyces griseus was more rapid and more abundant. The next research with Plating methods for counting the number of colonies shows that the formula B can grow Streptomyces griseus more rapid and abundant than formula C and D. Growth measurements in liquid medium, plating methods shows that The growth of Streptomyces griseus ATCC 10137 reaches optimum in formula B. In This medium the number of colonies increase rapidly. Gravimetry methods based on dry cell weight shows that the formula B is the optimal medium for growing Streptomyces griseus according to slope value highly.

Based on this case, it can be concluded that the formula B which contain 0,5% refuse of tofu in ISP-4 medium without (NH4)2SO4 is the optimal medium for growing Streptomyces griseus ATCC 10137.

Keyword: Refuse of tofu, source of nitrogen, number of colonies, dry cell weight, *Streptomyces griseus*, refuse of tofu concentration.